Filing Date: 6/27/2003

EMC Docket No.: EMC-01-141CIP2

## **REMARKS**

Applicants thank the Examiner for his careful consideration of the subject application. Applicants have carefully considered the Advisory Action mailed December 23, 2008. Claims 1-17 were rejected and remain pending. Claims 1, 6, 10, and 14 have been amended in this response. Claims 1-9 were rejected under 35 USC 101 and Claims 1-17 were rejected under 35 USC 103. Based on the amendments and arguments herein, Applicants respectfully request reconsideration, that the aforementioned rejections be withdrawn, and that the claims be placed in condition for allowance.

## 35 USC 101

The Office Action rejected Claims 1-9 under 35 USC 101 as non-statutory subject matter. Specifically, the Office Action claimed as the specification stated that an "architecture is neither a process, a machine, a manufacture, nor a composition of matter . . . [rather an] architecture is a software based framework for implementing a system." Applicants respectfully disagree, traverse this rejection, and assert that the claims as written are patentable subject matter.

First, Applicants note that an architecture can be a hardware architecture or the like and respectfully assert it is not, as asserted in the Office Action, simply a software based framework. In Claim 1, there are clearly physical components such as the data storage systems and communication path. Therefore, Applicants respectfully assert that it is this physical architecture operating in conjunction with the software that places Claim 1 within the aforementioned statutory classes. Applicants further note, that many other portions of the subject application support this assertion of the software working in conjunction in hardware, for example take Page

Filing Date: 6/27/2003

EMC Docket No.: EMC-01-141CIP2

15 line 14 "DRM Server 116 is connects via internet network cloud."; and Page 16 line 13-14 "Each Agent and the Server is interconnected by an IP line and the IP network itself;" where a physical connection to via an internet cloud clearly implies any software must be in conjunction with a tangible medium. As well, Page 16 18-22 clearly shows this connection "Each Agent and Server in a preferred embodiment comprises software, such as C++ code stored and running in a digital computer, and which may be included in whole or in part on a computer readable medium such as medium 201." If software is running in a digital computer medium it is associated with this medium. Further, Page 62 line 6 references Figure 22 which illustrates both the agent and the server being associated with physical tangible hardware elements.

In conjunction with numerous references in the specification, Claim 1, 6, 10, and 14 states that the "primary software agent hosted on each of said data storage systems" and that "each failover software agent residing on a host." Applicants assert that this again shows that the software claimed in conjunction with a physical medium, which renders it patentable subject matter. Applicants assert that this position is supported by *In re Alappat. 33 F.3d 152(Fed.Cir. 1994)*. Therefore, based on the foregoing, Applicants respectfully submit that Claims 1, and Claims 2-9 which depend on Claim 1, are statutory subject matter. Applicants therefore respectfully request that these rejections be removed and Claims 1-9 and 14-17 be placed in condition for allowance.

## 35 USC 103

The Office Action rejected Claims 1-17 under 35 USC 103 as being unpatentable over Sicola et al (US Pre-Grant Publication 2004/0064639), hereinafter Sicola, in view of Mashayekhi et al. (US Patent 6,922,791) hereinafter Mashayekhi. Applicants respectfully assert that Sicola in

Filing Date: 6/27/2003

EMC Docket No.: EMC-01-141CIP2

combination with Mashayekhi does not teach the claimed invention. However, to more clearly claim the current invention Applicants have amended independent Claims 1, 6, 10, and 14.

Claims 1, 6, 10, and 14 are architecture, method, and system versions of the current invention.

Applicants assert that Sicola may not be used for a proper 35 USC 103 rejection in combination with Mashayekhi for Claims 1, 6, 10, or 14 as these references do not satisfy the tested enunciated in *Teleflex v. KSR*. In *Teleflex v. KSR*, the Supreme Court stated that a proper 35 USC 103 rejection requires the following steps be performed: (1) Determining the scope and content of the prior art; (2) Ascertaining the differences between the claimed invention and the prior art; and (3) Resolving the level of ordinary skill in the pertinent art. *Teleflex Inc. v. KSR Int'l Co.* 127 S.Ct. 1727, 1741, 82 USPQ.2d 1385, 1396 (2007). This three part test has also been reemphasized and promulgated in the Federal Register. *Federal Register*, Vol. 72, No. 195.

Applying the KSR test to determine the scope and the content of the cited art, Applicants first address the scope of Sicola. Sicola states he discloses a "data replication system having a redundant configuration including dual Fibre Channel fabric links interconnecting each of the components of two data storage sites." "[E]ach site comprises a host computer and associated data storage array, with redundant array controllers and adapters." "In addition, association sets are employed by system to provide failure consistency by causing the group of logical units/volumes to all fail at the same time ensuring a point in time consistency on the remote site."

Applying the second prong of KSR, Applicants now address the differences between the claimed invention and Sicola. Applicants assert that Sicola does not disclose, at least, "failover software agents" as claimed and, in particular does not disclose, "wherein each of said failover

Filing Date: 6/27/2003

EMC Docket No.: EMC-01-141CIP2

software agents is configured to execute scripts residing on the host to control host applications." In the Office Action, paragraphs [0049]-[0051] and [0054] are asserted to be comparable to the claimed "failover software agents." Reviewing this portion or Sicola in toto, Applicants find no reference to "wherein each of said failover software agents is configured to execute scripts residing on the host to control host applications."

Applying the first prong of KSR to Mashayekhi, Applicants now address the scope of Mashayekhi. Mashayekhi, states he provides "a failover method and system . . . for a computer system having at least three nodes operating as a cluster." (Mashayekhi abstract). Where that failover method "assign[s][ing] a failover node based on the determined weights of the surviving nodes." (Mashayekhi abstract). This failover method includes "assigning applications running on the failed node to the failover node." (Mashayekhi Col.4 l. 48-49) Mashayekhi states his invention proceeds by "detecting failure of one of the . . . nodes, determining a time of failure . . . assigning a failover node . . . assigning applications running on the failed node to the failover node. (Mashayekhi Col.4 l. 44-50) Mashayekhi therefore discloses assigning nodes given a failure.

Applying the second prong of KSR, Applicants now address the differences between the claimed invention and Mashayekhi. Applicants assert Mashayekhi does not rectify the deficiencies of Sicola and does not disclose, at least, "failover software agents" as claimed and, in particular does not disclose, "wherein each of said failover software agents is configured to execute scripts residing on the host to control host applications." Mashayekhi deals with failovers and how to perform "assigning applications running on the failed node to the failover node." Mashayekhi does not discuss the "applications" in detail and does not disclose "wherein

Filing Date: 6/27/2003

EMC Docket No.: EMC-01-141CIP2

each of said failover software agents is configured to execute scripts residing on the host to control host applications."

Addressing the third prong of KSR, Applicants further assert that one skilled in the relevant computer arts would not bridge the gap to arrive at the current invention. Therefore, Applicants respectfully assert that these references, in combination or in isolation, fail to satisfy the 35 USC 103 test as promulgated by the Supreme Court in KSR. As a result, Applicants assert that this 35 USC 103 rejection is improper and respectfully request it be withdrawn and Claims 1, 6, 10, and 14 be placed in condition for allowance. As Claims 2-5, 7-13 and 15-17 depend on Claims 1, 6, 10, and 14 and Claims 1, 6, 10, and 14 not are believed allowable, Claims 2-5, 7-13 and 15-17 should be allowable for at least he same reasons. Therefore, Applicants also respectfully request that the rejection of Claims 2-5, 7-13 and 15-17 be withdrawn and these claims be placed in condition for allowance.

Applicant: Yao Wang, *et al.*U.S.S.N.: 10/608,757
Filing Date: 6/27/2003

EMC Docket No.: EMC-01-141CIP2

## Conclusion

In view of the foregoing, Applicants believe that the application is in condition for allowance and respectfully request favorable reconsideration.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (508) 293-7450.

Please charge all fees occasioned by this submission to Deposit Account No. <u>05-0889</u>.

Respectfully submitted,

Dated: January 22, 2009 /Joseph D'Angelo/

Joseph D'Angelo (Reg. No. 56,800) Attorney for Applicants EMC Corporation Office of General Counsel 176 South Street Hopkinton, MA 01748

Telephone: (508) 293-7450 Facsimile: (508) 293-7189